(No Model.)

H. N. HEWLETT.

SALT PAN.

No. 265,806. Patented Oct. 10, 1882.

Fig. 2.

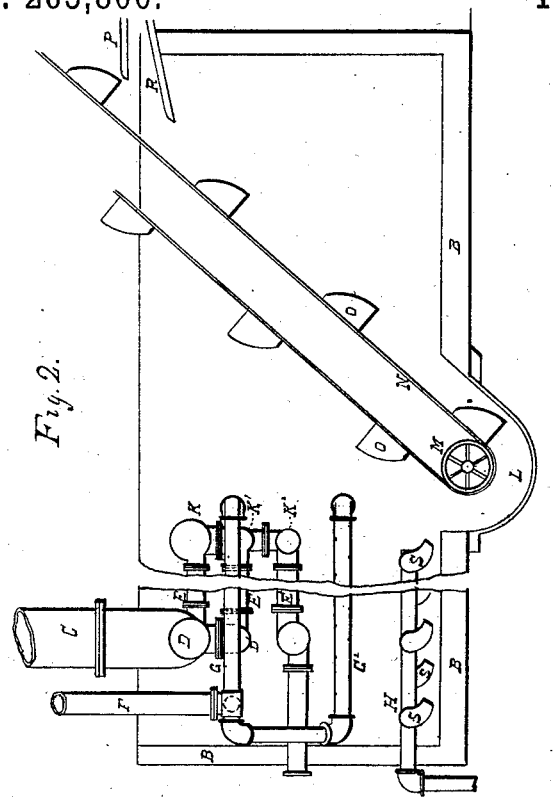


Fig. 4.

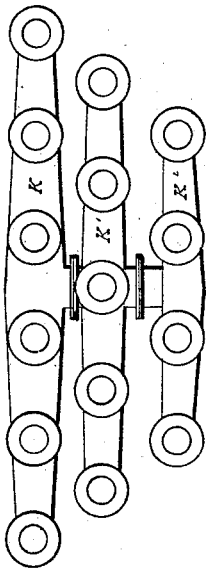


Fig. 1.

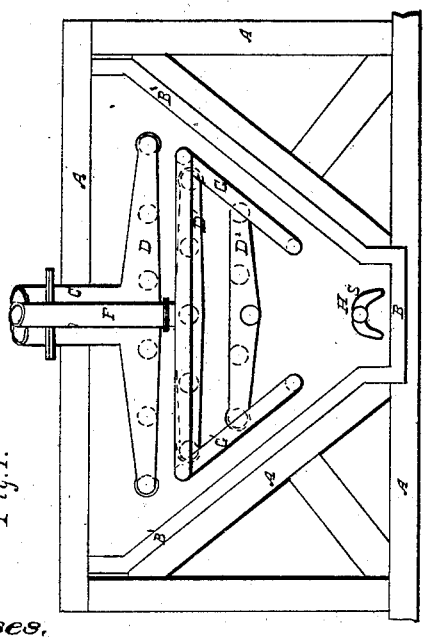
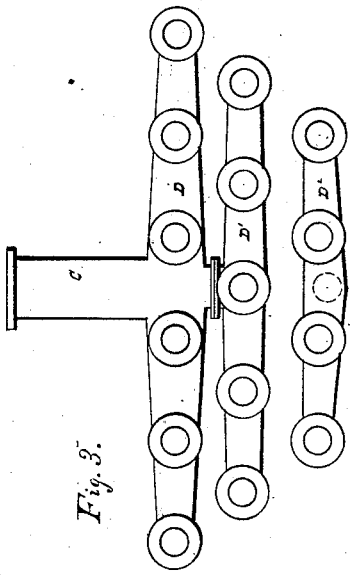


Fig. 3.



Witnesses.

Sandy F. Moore.

Geo. H. Lothrop

Inventor.

Henry N. Hewlett.

By Geo H Lothrop.

Atty.

UNITED STATES PATENT OFFICE.

HENRY N. HEWLETT, OF OSCODA, MICHIGAN.

SALT-PAN.

SPECIFICATION forming part of Letters Patent No. 265,806, dated October 10, 1882.

Application filed June 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY N. HEWLETT, of Oscoda, in the county of Iosco and State of Michigan, have invented a new and useful Improvement in Salt-Pans, of which the following is a specification.

Figure 1 is a vertical section through one end of the pan. Fig. 2 is a vertical longitudinal section. Figs. 3 and 4 are end views of the steam-pipes used for heating the brine.

My invention consists in creating a current in a channel at the bottom of a salt-pan, by which the salt crystals are forced into a place whence they can be easily removed.

A represents a frame supporting a salt-pan.

B B′ represent a salt-pan, made preferably of galvanized iron, having inclined sides B′ and a narrow channel, B, at the bottom.

C is a steam-pipe to admit steam into the header D.

D D′ D² are headers at one end of the salt-pan, and are connected by the steam-pipes E, E′, and E² with corresponding headers, K, K′, and K², near the other end of the salt-pan. The connections between the headers are as follows: D to D′, K to K′ and K².

F is a pipe connecting with the two pipes G G². These latter pipes run lengthwise of the salt-pan, preferably just below pipes E², and are perforated with small holes, (shown in G²,) and arranged to throw jets of air alternately on opposite sides of said pipes. The ends of said pipes are closed.

H is a pipe running lengthwise of the salt-pan, near the bottom thereof, and provided with curved or oblique jets S, so placed that when a stream of water or brine is forced into said pipe it will issue through jets S and create a current on the bottom of the salt-pan, by which the salt crystals will be carried along and deposited in a sunken receptacle, L, in the bottom of the pan. Pipe H is connected with the delivery-pipe of a force-pump placed in any convenient place, and I prefer to have the suction-pipe of said pump led into the salt-pan, so that the brine in the pan will not be weakened by forcing in new brine or fresh water.

N is a belt running over a pulley, M, and a similar pulley (not shown) above the pan. O O are buckets carried on belt N.

P is a draining-board, and R a drip-board.

The operation of my invention is as follows: The salt-pan being filled with brine, steam is admitted through pipe C and the brine begins to evaporate. Air, preferably in a heated state, is forced through pipe F and escapes in jets into the brine through the perforations in pipes G G². This promotes evaporation and prevents coating. As the salt crystals form they slide down the inclined sides B′ of the salt-pan and are collected in the channel B. A stream of brine or water is now forced into pipe H and issues through jets S, thus creating a current in channel B, which carries the salt crystals therein collected along until they fall into the sunken receptacle or pocket L. Buckets O on belt N take up the salt from pocket L and deposit it on draining-board P, where it is drained and shoveled off into barrels. The drip from the salt on board P is caught on board R and returned to the pan.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the salt-pan, having inclined sides B′ and channel B, with pipe H, having therein jets S, and pocket L, as and for the purposes set forth.

2. The combination of the salt-pan, having therein the pocket L, with belt N, carrying buckets O, and operated by suitable mechanism.

3. A salt-pan having inclined sides, a narrow channel along its bottom, with a pocket therein adapted to collect the salt crystals and deliver them to an elevator, and suitable mechanism for forcing a current of brine through said channel and toward said pocket, substantially as herein shown and described.

HY. N. HEWLETT.

Witnesses:
SANDS F. MOORE,
D. BETHUNE DUFFIELD.